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# EUROPEAN PATENT OFFICE

## Abstracts of Japan

Publication Number : 11084234  
Publication Date : 26-03-99

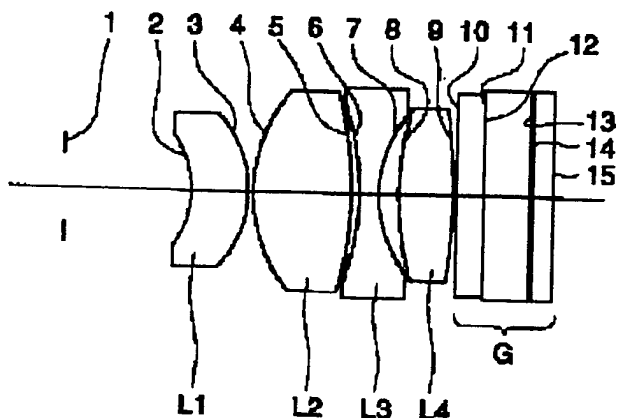
Publication Date : 02-09-97  
Publication Number : 09237042

Applicant : KONICA CORP;

Inventor : MORI NOBUYOSHI;

IPC Class : G02B 13/18

IPC Class : PHOTOGRAPHING LENS



Problem to be solved: To provide a photographing lens comparatively wide in the angle of view, high in image formation performance and short in entire length.

Solution: This photographing lens is composed of an aperture diaphragm, a 1st lens group L1 consisting of a meniscus lens turning its concave surface to an object side, a 2nd lens group L2 having positive refractive power and consisting of at least one positive lens, a 3rd lens group L3 having negative refractive power and consisting of a single lens, and a 4th lens group L4 having the positive refractive power and consisting of one positive lens in order from the object side; and satisfies a conditional expression  $-3.0 < f/f_3 < -1.2$  when the focal distance of the 3rd lens group L3 is  $f_3$  and the focal distance of an entire optical system is ( $f$ ).

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